Compliments of R. W. GARDNER.

HYDRIODIC ACID.

HYPOPHOSPHITES

IN

PHTHISIS.

Sixth Edition, August, 1888.

GARDNER'S

SYRUP OF HYDRIODIC ACID.

Syrup of Hydriodic Acid was *originally* introduced by R. W. Gardner in 1878.

The success attending the use of his preparation during the last ten years has led to the appearance of numerous imitations. If the physician desires the success which is making Hydriodic Acid famous, he should use only that preparation which has given it its reputation.

Gardner's Syrup of Hydriodic Acid contains 6.66-100 grains of Iodine in each fluid ounce, or 6.675-1000 grains of Absolute (Gasseous) Hydriodic Acid (HI); this is equivalent to 8.69-100 grains of Iodide Potassium. Absolute Hydriodic Acid consists of 99.78-100 parts of Iodine, and 22-100 of one part Hydrogen.

It is found necessary to prepare the Syrup of the strength above indicated to secure prompt and satisfactory results, as when it is weaker the dose must be correspondingly increased, which, owing to the heavy syrup, is cloying to the stomach, and much less apt to agree. As in most cases when it is

indicated, it is necessary to continue its use for considerable periods, this becomes quite important.

Hydriodic Acid is more active in equivalent relative quantities than any of the alkaline iodides, and produces all the characteristic constitutional and alterative effects of Iodine, not only more promptly in smaller doses, but without the peculiarly distressing and embarrassing results which usually follow and accompany the use of Iodide of Potassium. It is, positively, without irritant action, if in good condition, and may be given to the youngest children.

Hydriodic Acid should not be prescribed in combination with alkalies, as they would be at once converted into Iodides; nor with oxidizing agents, as the Hydriodic would be changed into Iodic Acid, which is poisonous, and produces toxic effects; nor with metallic salts generally.

In syphilitic diseases it may be combined with Bin-Iodide of Mercury with advantage, but not with the *green* (*Proto*) Iodide, as this would be converted into Bin-Iodide and render the mercurial unexpectedly active.

Saturation of the system by Hydriodic Acid is shown by iodism and frequently by a metallic taste in the mouth.

It is almost certain that Hydriodic Acid passes into the circulation, largely, without chemical change.

The proportionate arrangement of the elements constituting Hydriodic Acid is remarkable, the Acid being, in fact, almost wholly Iodine. The very small proportion of Hydrogen, being the true equivalent, suffices to entirely remove

the irritant quality from Iodine, by converting it into a non-irritant compound, from which, however, the full action of Iodine is obtained.

When decomposition has occurred in Syrup of Hydriodic Acid, it becomes first red and finally black. This is owing to the very feeble chemical affinity existing between its elements, and is caused by the gradual oxidation of the combined Hydrogen into water (H0) and the consequent freeing of Iodine, which passes at once into solution in the remaining Hydriodic Acid.

In this condition it is unfit for medical use, because the irritant action of free Iodine is again restored.

It will be seen that this change is inherent, though it may be delayed. After this change has commenced, however, it is progressive, and the preparation cannot be restored to its former condition.

The best method of preventing this change is to keep the Syrup in as cold a situation as possible, in a refrigerator if convenient, during warm weather, and carefully excluded from air by keeping it well corked.

Hydriodic Acid has a characteristic sub-acid taste, and if the Syrup contains the same quantity of Iodine used by the writer (6.66-100 grains in one fluid ounce), it will taste like lemon syrup, or lemonade. The palate, therefore, becomes a test of strength, and if no acidulous taste can be detected, the proportion of Hydriodic Acid present is very small or entirely absent.

The knowledge of the indications for Syrup of Hydriodic Acid is constantly increasing as the experience of medical men in its use becomes greater.

Dr. W. H. Bentley, of Woodstock, Ky. (*Medical Summary*, Jan. 1888, page 220), reports twenty-three cases of acute pneumonia treated successfully; nineteen cases of acute rheumatism, all rapid recoveries; also an inveterate psoriasis, affecting the whole person except the scalp, after other remedies had failed, yielded promptly to this remedy.

From reports published in the six editions of this pamphlet, the diseases which have yielded to this remedy are summarized as follows:

Hay Fever; Rose Cold; Poisoning by Lead, Mercury, or Arsenic; Acute and Chronic Rheumatism; Asthma; Chronic Bronchitis; Catarrh; Congestion of Lungs in children (Dr. F. R. Garlock, Racine, Wis., page 25); Adenitis; Eczema; Lupus; Chronic Malarial Poisoning; Lumbago; Acute Pneumonia; Psoriasis; Scrofulus Diseases; Goitre; Enlarged Glands; Cold Abscesses; Indolent Sores; Excessive Fat; Fatty Degeneration of the Heart, (See letter from F. C. Burrall, M. D., New York, page 19); to absorb non-malignant Tumors; and in the later stages of Syphilis its effects are described as "magnificent"; Syphilitic Phthisis, (See paper by William Porter, M. D., St. Louis, page 11).

As a rule it is found desirable to administer Syrup of Hydriodic Acid before meals, say half an hour previous to eating.

Doses.—In Hay Fever, Asthma, Chronic Bronchitis, Catarrhal affections, and where the object is to relieve local inflammatory conditions, it is better to begin with small doses, say half a teaspoonful in a tablespoonful of water, and gradually increase until the alterative action upon the mucous surfaces has given the desired relief.*

In Acute Rheumatism the remedy may be given without regard to the fever, and should be given at intervals of two to four hours, in doses varying from a teaspoonful to a tablespoonful, until pain is relieved, which usually occurs in from twenty-four to forty-eight hours.

In Syphilis, the remedy is to be pushed according to the symptoms and toleration of patient, until the condition is controlled.

It should always be administered in from one to two tablespoonfuls of water; in warm weather, ice-water makes a very refreshing draught if used with it.

If physicians will kindly give me their experience in the use of this Syrup, I will publish it for the benefit of the profession at large.

In communicating such matter, please state if I am at liberty to use it in this way.

*If Iodism is produced intermit, suspend, or reduce the dose and begin again when thought desirable. In many cases better results are obtained by small doses frequently repeated, than by large doses given at longer intervals.

Thanking those members of the profession to whose courtesy I am indebted for the facts I have published regarding the use and efficacy of this remedy, and assuring all those gentlemen who have sent me personal communications expressive of appreciation of my efforts, of my deep gratitude and obligation. I am, very respectfully,

R. W. GARDNER.

HYDRIODIC ACID. ITS USES IN GENERAL PRACTICE.

BY WM. C. WILE, A. M., M. D., OF DANBURY, CONN.

Ex-Vice-President of the American Medical Association, Member of the British Medical Association, Editor of The New England Medical Monthly, etc., etc.

The difficulties which were in the way of the use of hydriodic acid because of its rapid decomposition were considered so insurmountable that it was not until the year 1878, when an unalterable syrup was presented to the profession, that it came into use. Soon after this, in 1880, my attention was attracted to an article by Dr. J. B. Oliver, of Boston, which was published in the *Boston Medical and Surgical Journal*, of the issue of March 4th of that year.

Dr. Oliver, in his paper, alluded to the use of syrup of hydriodic acid in the treatment of asthma, and, in conclusion, says that Dr. Knight "had surprisingly satisfactory results" from the same remedy. Having under observation at this time a severe case of chronic asthma, complicated

with chronic bronchitis, on which I had tried iodide of potassium, which was intolerable to the stomach, I at once put the lady, a woman of forty-nine years, upon the syrup of hydriodic acid. The effect was all that could be desired. There was an almost immediate relief from the asthmatic conditions, rapid amelioration of the cough, decreased expectoration, which was very profuse before the exhibition of the remedy. The sputa, which was thick and viscid, became thinner in character, and my patient's general health commenced to improve, and after three months of the use at the syrup of hydriodic acid, in increasing doses, till two teaspoonfuls were taken, three times a day, complete recovery took place, and from that time till her death of pneumonia two years later, had no relapse. The results in this case were *so* satisfactory that ever since it has been my favorite remedy in *all* asthmatic troubles, and though every case has not yielded so promptly and effectually as this one, still I have never administered it in this class of diseases without unmistakable evidences of relief and comfort. In chronic bronchitis of long standing in my hands it has produced most excellent results, and can be given when the iodide of potassium cannot for a moment be tolerated. The cases which seem to derive the most benefit from this remedy belong to that class of long standing bronchitis, when the lung seems about to take on a deeper seated and less tractable form of disease. My attention

has been frequently called, in the treatment of chronic bronchitis with hydriodic acid, to the fact that small doses, frequently repeated, are of signal service, when larger doses do not seem to accomplish the same results. In fact, from long experience, I would suggest the constant use of the syrup in small doses, fifteen drops, gradually increased a drop a dose, until the point of toleration is reached, in order to get the most satisfactory and lasting results. While practicing at Sandy Hook, Conn., I had the opportunity of observing its action in lead poisoning in a great many cases, lead entering largely into the compound which is mixed with the crude rubber during the process of manufacture. I depended almost entirely on the syrup of hydriodic acid for all forms of chronic lead poisoning. In lead paralysis this remedy, combined with keeping the bowels quite free, and the application of the faradic current, were the only means employed, and always with satisfactory and oftentimes surprising results.

Wrist-drop and chronic abdominal pains would yield to the remedy, combined with saline cathartics. In scrofulous diseases, of children especially, does the hydriodic acid seem to produce most marvelous results. In infantile eczema, enlarged glands, cold abscesses, indolent sores, treated with small doses, gradually increased until it is all that can be borne, will prove a source of great gratification to the patient and gratitude towards the doctor.

At the suggestion of my friend, Dr. F. A. Burrall, of New York, I am using it in a case of obesity, with the result of steady diminution of the amount of fat, without a single disagreeable symptom, or interference with the general health, or the action of any of the functions of the body. In hay fever it has been used by other observers with good results, but my own experience with its use in this disease has been *nil.*

It is hardly necessary for me to more than say that in all the latest stages and manifestations of syphilis it has yielded its most magnificent results. Pleasant to take, rapidly pushed to large doses, I have found the most pronounced and favorable effects. Patients take it readily, and the improvement is so rapid and immediate that they need no urging to continue its use for as long a time as the doctor deems desirable.

My paper has now reached the limits which I prescribed for it, but I cannot resist the temptation of recording briefly three of the most unique cases of my experience with this drug. The one was a man forty-two years of age, who was a paper-box manufacturer, suffering from arsenical poisoning from the inhalation of arsenical dust arising from the glazed paper which he handled and cut. After repeated trials of other remedies, the syrup of hydriodic acid made a complete cure inside of a month.

In Danbury, the city in which I now reside, they make

large quantities of hats; in fact, it is said that at least one-half of the hats made in the United States are made in that place. To preserve the fur, carrot is used, which is composed largely of mercury; consequently many of the hatters working in the plank-shop suffer from mercurial poisoning, and many from mercurial tremor and paralysis. No remedy has proved of so much value to me as the hydriodic acid. Always prompt in its effects and reliable in its results. The last case was one of chronic rheumatism in a man thirty-seven years old. He was almost a complete cripple in his hands and feet and had not done a stroke of work in two years. I had exhibited every remedy known to me, including electri city, massage, Turkish baths, colchicum, etc., etc., etc., but until I commenced the use of the hydriodic acid no permanent improvement was made. After continuing its use for four months the patient seemed, and was to all appearances, entirely well. For fear of relapse, he continued taking it for two months more, in order, as he explained it, "to make assurance doubly sure." I do not believe that this remedy is enough understood for the advantages it possesses over all other forms of iodine nor as thoroughly appreciated as it should be, but of this I am assured, that it will be tolerated by the stomach many times when no other preparation of its class can be retained, and do work that none other will. It is scarcely necessary for me to state that I have never used any other preparation than that of the originator of the unalterable syrup Mr. R. W. Gardner, of New York.

SYPHILITIC PHTHISIS

BY WILLIAM PORTER, M. D.

Physician to the Throat and Chest Department of the Protestant Hospital, to St Luke's, Consulting Physician to the City Hospital, St. Louis.

Among the many causes of chronic processes in the lung a very important one is syphilis. It is probable that many of the good results which have formerly been attributed to the use of the iodides in phthisis have been attained because the condition was syphilitic rather than tubercular.

Be that as it may, we have now abundant proof of the fact that syphilis does cause a chronic deposit in the lung, which, in both its local and constitutional tendencies, may resemble, and often be mistaken for, tubercular phthisis.

In a paper read before the Missouri Medical Society in 1877, I endeavored to show that syphilis might invade the lung in different ways. The cases reported in that paper were, so far as I can learn, the first recorded histories of syphilitic phthisis in this country, although Fournier had given his well-remembered lecture the previous year, and Goodhart's reports in London were published the same year.

In May, 1888, eleven years after, I had the pleasure of again reviewing the subject before the same Association. The position was no longer a doubtful one. Many contributions had been made to the subject during a decade, and many cases recorded.

So much testimony has been offered by competent observers as to the existence of a condition which we may well call syphilitic phthisis, that I will not cite cases in affirmation, but will discuss briefly several of the manifestations of syphilis as found in the lung.

In both of the papers to which I have referred these propositions were offered:

1. From syphilis may result specific deposit or gummata in the lungs resembling the nodules formed in tubercular disease.

2. Syphilitic processes may cause arterial occlusion in the lung.

3. Syphilis may give rise to a fibrous exudation in the lung, or specific fibrous phthisis.

4. Syphilis may hasten the development of ordinary phthisis by weakening the power of resistance in a constitution in which there is a tubercular tendency.

PULMONARY GUMMATA.

In support of the first statement, in 1877 I had but the history of a single case which I recalled as almost typical, and though the final proof was wanting in this case, I felt justified at the time in citing it as a case of syphilitic deposit in the lung.

A number of cases have since come under my notice, in which the history, the associated symptoms and the result after the exhibition of specific medication left no doubt in

my mind as to the nature of the invasion.

While detailed accounts of individual cases would be burdensome, I will give briefly the conclusions of a few of the many writers upon the subject.

Schnitzler [Vienna, 1880,] describes infiltrations of the lung and speaks of the importance of distinguishing between tubercular and syphilitic phthisis. Goodhart, Fournier and Virchow have done much to impress the importance of this subject, while in America valuable contributions have been made by Dr. E. T. Bruen in *Pepper's System of Medicine*, and Dr. W. H. Porter in *The New York Medical Journal*, August, 1885.

Gummata are not so frequently found in the lungs as in other organs of the body, and are generally associated with other local manifestations.

SYPHILITIC DISEASE OF PULMONARY BLOOD VESSELS.

That syphilitic processes may cause arterial occlusion in the lung is susceptible of proof, but the few cases recorded may be fairly relegated to the first or third classes, i. e., to those in which gummata are found, or to those characterized by fibrous exudation. A blood vessel may be pressed upon by a syphilitic deposit, or small nodules may develop within its walls, or contraction, due to fibrous tissue, may encroach upon its caliber. The injury to the vessel is a complication, but the local condition is the gummata, or the newly-formed fibroid tissue.

SPECIFIC FIBROID CHANGE IN THE LUNG.

The third proposition that syphilis may give rise to a fibrous exudation in the lung, is a most important one.

Many writers believe that a fibroid change, an interstitial new formation, is the characteristic pathological process in the majority of cases of pulmonary syphilis. Dr. Panceritius, a general practitioner of Berlin, published a work of 300 pages in 1881 on syphilis of the lung. While he does not claim to have found a large number of syphilitic cases that had pulmonary gummata, he has noted an interstitial pneumonia with fibrous exudation along the course of a bronchiole or pulmonary artery.

Dr. W. H. Porter, in his essay of eighteen months ago, already referred to, carefully describes new connective tissue change as "broad bands closely resembling tendon tissue, and intervening between these tense layers there is a universal thickening of the pulmonary tissue, which, also, involves the vesicular walls." Oftentimes the structure between the capillaries and the air vesicles is much thickened. This necessarily renders the interchange of gases more difficult and explains in part the dyspnœa so often attendant upon the disease when the lung is greatly involved. Sometimes fibroid thickening is found in the small bronchi, and even the vesicular spaces contain inflammatory exudation. The changes taking place in the vesicles, as found by this author, are so interesting that I will quote his record in full.

"[a] The air spaces were filled with red blood disks, leucocytes, desquamated epithelium, and fibrillated fibrin, identical with that found in the second stage of a lobar pneumonia.

"[b] Others were filled with large, round, distinctly nucleated epithelial cells, with a diameter varying from one fifteenth hundredth to one two thousandth.

"[c] Others were filled with decolorized round cells, as in gray hepatization of lobar pneumonia.

"[d] Others contained a granular degenerating material which would not stain. The marked features of these changes was that all four conditions were irregularly intermingled as though in each air sac it ran its course independently of all the rest, going regularly through the red and gray hepatization; at this point degeneration, rather than resolution, set in. The thickened walls prevent absorption, and the degenerating inflammatory products probably account for the copious expectoration. This process is best classed as a degenerative pneumonia and one peculiar to syphilis."

Bruen says that the interstitial new formation of which we have spoken is often "evoked by antecedent catarrhal inflammation." The smaller bronchi are narrowed, or even occluded, and new blood vessels are freely produced.

Greenfield and Goodhart believe that the vascularity and high grade organization of the new growth renders it

pathologically distinct from ordinary tubercular processes.

Virchow and Green maintain that in syphilis the interstitial changes are among the first pulmonary lesions, while in phthisis the fibroid change is secondary, or, at most, simultaneous with changes in the alveoli.

Much more proof might be adduced to show the existence of a fibrous exudation in the lung due to syphilis and having distinct characteristics.

TUBERCULAR PHTHISIS IN SYPHILITIC SUBJECTS.

Whatever diminishes the power of resistance to disease in the human subject is a special invitation to an invasion of phthisis. Syphilis in this way is often a forerunner of tubercular phthisis, especially if in the specific treatment due care is not taken to support the strength and aid proper assimilation. I believe that too much stress cannot be laid upon this point, for we have all of us seen instances of rapidly progressing phthisis following in the wake of syphilis, where there was no evidence of either gummata or fibroid processes, but in which were all of the symptoms of tuberculosis even to the existence of the bacillus.

It is probable that pulmonary syphilis is sometimes inherited. The autopsies made by Balzer and Brandhomme. [*American Lancet*, 1888,] upon syphilitic still-born children showed characteristic syphilitic changes. Virchow, Lebert and Depaul have described syphilitic nodules in the lungs of children, while Dr. Furgerson [*Medical News*, 1885,]

reported a number of cases of phthisis in children where recovery took place after the administration of specific medication.

Pulmonary syphilis unaccompanied by lesions elsewhere, is rare. Oftentimes it is associated with laryngeal complications. The pathological change may occur in any part of the lung. Schnitzler found that the middle and lower lobe were most frequently affected. Bruen found the most frequent evidence at the base, while Dr. W. H. Porter believes that the apex is generally first affected, and that the lesions diminished from apex to base. In thirteen cases, including two under care since my last paper was written [May, 1888,] the lesion was found in the lower lobes in seven and the apex in four. In the other two cases the middle lobe of the right lung was involved.

DIAGNOSIS.

A history of syphilis and syphilitic lesions of other organs than the lung will, of course, arouse suspicion as to the cause, but in some cases even these are absent. The co-existing complications which I have found most frequent are syphilitic laryngitis and periostitis.

The physical examination in a typical case will show a well-defined area of dullness with the respiratory murmur in other parts of the lung normal. The line of demarkation between the healthy and the diseased structures is often clearly demonstrable both by percussion and auscultа-

tion. The absence of the tubercle bacillus and improvement under syphilitic treatment are with the evidences before mentioned, nearly conclusive.

TREATMENT.

When a case of syphilitic phthisis is first seen there will be, generally, in consequence of the advanced stage of the disease, an immediate demand for tonics and good nutrition. It is impossible to make much progress in such a case unless the functions of assimilation and secretions are stimulated.

"The mixed treatment," combining mercury and the iodides, has been for a long time held in high esteem. I have been in the habit of ordering the biniodide of mercury ointment locally where the lesion is well defined, especially if there is much pain. The counter irritation seems to be of value here. More recently, and where there is much debility or where the iodides cannot be borne or freely used, I have been using hydriodic acid with good result. I have been led to consider it an almost necessary agent in all cases of syphilitic disease of long standing of the lungs or air passages. In combination with chlorodyne [made by Squire's formula] I find hydriodic acid available in cases with much cough or asthma.

The great objection to hydriodic acid has been that it is so susceptible to change from heat and air that it is difficult to to keep it of uniform strength. This objection has

been overcome by Mr. R. W. Gardner, of New York, whose Syrup of Hydriodic Acid is practically a permanent solution, as well as pleasant to the taste.

It must not be forgotten that in the successful treatment of syphilitic phthisis and laryngitis, not only should the patient be nourished, but such remedies selected as will act specifically and yet not interfere with assimilation.—*New England Medical Monthly.*

FATTY DEGENERATION OF THE HEART—AMYLOID LIVER—OBESITY.

LETTER FROM F. A. BURRAL, M. D., 48 WEST 17TH STREET, NEW YORK.

NEW YORK, June 29th, 1888.

MY DEAR MR. GARDNER:—I have been using your Syrup of Hydriodic Acid for some time, and regard it as a valuable remedy in glandular enlargements, obesity, and fatty degeneration of the heart. It seems to me to afford an excellent method for exhibiting iodine. I saw one case of enlarged liver, supposed to be amyloid, in which the gland diminished as shown by measurement while the patient was using this remedy. This may have been only a coincidence, but the fact was very apparent.

I regard the medicine as a very valuable addition to our list of remedies. Truly yours,

F. A. BURRALL, M. D.

LETTER RECEIVED FROM JAS A WILLIAMS, M D.,

164 West 34th Street, New York City.

New York, Oct. 22d, 1886.

Mr. R. W. Gardner—My Dear Sir:—No doubt ere this you have forgotten all about the promise I made a year or two ago, namely, to report to you the results of two or three bottles of your Syrup of Hydriodic Acid, sent to me on trial. At this late date I briefly state a few facts as follows:

Two years ago I contracted (from exposure) a severe attack of capillary bronchitis, confining me to my room most of the winter. As spring and warm weather approached, I hoped to lose my cough, which was very severe, but did not.

As I was preparing to go to the country the following summer, one of your agents called with a bottle, or sample, of your Syrup of Hydriodic Acid, saying you claimed for it special virtue in bronchitis. I requested a bottle or two sent to me to test in my case. It was sent. I took a few doses and went off to the country, forgetting to take the medicine with me, and, thinking the change of climate would cure me, I did not send for it. I improved, but, returning to the city in the fall, grew worse. I began to arrange for a trip South for the winter. Accidentally, I came across the bottle of Acid I had forgotten all about, then decided to give it the trial I had promised. I took it

a few days and felt better,—and stopped it, not believing it was due to the medicine. I grew worse very soon, gave it another trial, and in less than ten days I was very much improved. I again ceased taking it, and in a few days began to cough more. It is but frank to say I did not have much faith in the medicine. After discontinuing it several times, growing worse each time, and improving every time I resumed its use, I was cured—not of my cough, but of my incredulity relative to its merits in my case. I soon after had such confidence in its helping me, that I gave up my trip South and worked, subjected to more or less exposure, all winter. I improved and gained in weight. I used it during the winter whenever I had a return of cough, and came out sound and well; and your Acid will always have the *credit* and *you* my sincere thanks. I should have mentioned that sometime in October following you sent me a bottle to test in another case, Mrs. Dr. B., who had gone through a similar experience, at the same time I had, with capillary bronchitis, and left her with a very troublesome cough. It was equally efficacious in her case.

In January last I began to prescribe it, and now regret I did not keep notes of all cases.

Miss F.—bronchitis—one year—much improved after taking it a few weeks.

In March was called to see Mrs. W., an elderly lady,

about sixty-eight years of age, very feeble, with profuse bronchorrhœa, with which she had been afflicted for many years. At the time I was last called, she had tubercular deposits in the apices of both lungs, and so feeble she could not turn in bed. I did not believe that any medicine would be of much use to her, but concluded to try the Acid. She improved, and after two months was able to go about, and as well as she had been for years, but not cured.

Mrs. N., about sixty-five, had suffered twenty-five years with asthma, from bronchitis; could not lie down when I first saw her—in six weeks so far improved that she left off treatment.

Mrs. L., age about fifty. Bronchitis, five years; scarcely able to go up one flight of stairs; has taken it a few weeks with fine results.

After testing it in bronchitis with such satisfactory results, I decided to use it in other cases.

February last, Mrs. Geo. M., aged about forty, called to consult me relative to a "Fibroid Tumor" of the breast, about the size of an orange. It was growing, and, she said, becoming quite painful. I have known her for ten years; she was always a thin, delicate lady. I put her upon the Acid treatment, and local applications of tincture iodine. I soon found the tumor was being absorbed, and she growing fat. After three months' treatment, she returned to her home in Connecticut, having gained twenty-five pounds

with scarcely a trace of the tumor. I directed her to keep up the treatment for a few weeks longer.

About two months ago, Mr. M. S., from California, called relative to a paralytic stroke, which occurred about six months ago, affecting all the left side. He had been under treatment, in hospital and elsewhere, with little improvement. He was pale, thin, nervous, and not able to walk alone. Suspecting the trouble to arise from syphilis (he had a chancre ten years ago) he has been taking Hydriodic Acid, and, twice a week, electricity. He has gained fifteen pounds; comes to see me walking alone, with the aid of a cane, with a wonderful improvement in the paralysis, looking and feeling like a different man.

Miss S., about twenty-five years of age, came July last with a tumor of the breast. It started to develop about five years ago, which I suspected to be adenoid. After taking the Acid she improved in health and weight, but complained of it becoming quite painful, and not finding it decreasing after thirty days' treatment, decided to remove it, and did so. It proved to be a cystic tumor. I mention this case as the results of the operation were a little unusual as it was done in August. After dissecting out the tumor, with the kind assistance of my neighbors, Drs. Amway and DeWolfe, we inserted a drainage tube, then stitched and strapped up the wound. Next day I removed the tube; third day eight or ten stitches were taken out. On the

sixth day it had healed perfectly, without one drop of suppuration, none present even on removing stitches, all healing by first intention. It is my belief that the previous Acid treatment contributed largely to this result, and I shall in future make further trial of it previous to operating.

About three months ago, Mrs. M., age, thirty-eight, called relative to tumors,—one on the neck and one on the side. Acid and electricity have been the treatment. She has gained about fifteen pounds. The tumor on the neck is all absorbed; the one on the side, about three-fourths. She is feeling finely and looks quite like a young miss.

That Hydriodic Acid is one of our best agents in bronchitis, proof is not wanting.

That it is very efficacious in absorbing tumors, nodes, and a variety of non-malignant growths, some of which may in time become malignant, I have no doubt.

That it will add flesh and improve the general health of nearly all, if not all, is no longer a question with me.

I am now testing it in scrofula, tuberculosis, anæmia, and debilited cases, especially when I suspect inherited maladies with very satisfactory results.

I find other makes now in the market, but have not tried them. I have thoroughly tested yours and not found it wanting. I have no time to try others. I trust you may be able to keep it up to the present standard, and if so, from its sale alone, you should never want for bread.

I find the best plan is to give a teaspoonful in an ounce of water, and in a few days increase to a teaspoonful and a half, adding a little more water as the patient may desire. This, as a rule, is, I think, quite sufficient, and will improve the appetite when a larger dose wil sometimes act to the contrary.

I am, &c., JAMES A. WILLIAMS, M. D.

BRONCHIAL CATARRH AND ALL CATARRHAL AFFECTIONS OF THE THROAT AND LUNGS.

F. R. GARLOCK, M.D., RACINE, WIS., WRITES:

RACINE WIS., June 6th, 1888.

MR. R. W. GARDNER—MY DEAR SIR: In relation to your Syrup Hydriodic Acid, I can say that I have used it quite extensively in my practice. I find it to be a very superior article in cases of Bronchial Catarrh, and in fact in all catarrhal affections of the throat and lungs. Especially is its use very advantageous in children who are suffering from congestion of the lungs from sudden colds. I like its use much better than that of Potassium Iodide, as it does not nauseate the stomach, nor does it cause the other disagreable effects of that remedy. In fact in all cases in which Iodine is indicated, the Syrup of Hydriodic Acid, as prepared by you, I consider an excellent remedy. With kindest regards, I am yours, &c.,

F. R. GARLOCK, M. D.

NOTES OF SIXTEEN CASES ACUTE RHEUMATISM,

TREATED BY GARDNER'S SYRUP HYDRIODIC ACID.

BY JAMES CRAIG, M. D., JERSEY CITY, N. J.

In an article appearing in the New York *Medical Record*, April 21, 1883, I speak of the manner in which I was led to the use of this Syrup in cases of acute inflammatory rheumatism. The object of the present article is not merely to reiterate what is said in that publication, but to emphasize my entire faith in the efficacy of this treatment by the citation of cases of cure, and the statement that I have yet to find a case in which, the Syrup being properly used, it has failed to meet my expectations.

Since the publication of my first article this method of treatment has been employed by a number of physicians with success, shortening the duration of the disease, relieving pain, reducing temperature, and in all cases leaving the patient without heart complications, the remedy preventing exudation and organization of plastic material. I order the Syrup in from two to three teaspoonful doses, in a wine glass of water, every two hours, lessening the dose as improvement takes place, and continuing the Syrup for about a week or ten days after the symptoms have disappeared, to insure recovery and prevent relapse.

The old method of treatment by the use of bicarbonate of potassium is slow, and its continued use brings about a depraved condition of the system by reducing the amount fibrin in the blood and destroying the red corpuscles. It also acts as an irritant to the stomach, injuring the mucous membrane and causing loss of appetite. The depraved condition of the blood can be seen in the pale face, pallor of the lips, and enfeebled action of the heart, requiring weeks for the patient to recover from the disease and its treatment. Salicylic acid has had its day and has been found wanting, being replaced by some with oil of gaultheria—salicylic acid in another form.

This acid, from its difficult solubility, allows its crystals to irritate the throat and stomach, and, in some, occasions so much vomiting as to render its continued use impossible.

Syrup of Hydriodic Acid is a good remedy in sub-acute rheumatism also, but is not so prompt in its action as in cases of the acute form.

I have tried it in chronic rheumatism, but cannot say that I have observed any good results. In some cases I use a lotion as follows:

℞.	Liq. plumbi subacetatis, - -	℥ ij
	Tincturæ arnicæ - - -	℥ ij
	Aquæ, - - - - -	℥ vj

M. Sig.—Add one part of the solution to three parts of hot water, and apply saturated flannels to the inflamed

joints. It usually gives immediate relief. This solution is of a beautiful yellow color when properly prepared.*

The following are a few of the numerous cases of successful treatment of inflammatory rheumatism by the use of the Syrup of Hydriodic Acid:

Case I.—On December 16, 1880, I was called to see Mary S., aged eight years, who was suffering from a very severe attack of rheumatism. The knees and ankles were very much swollen, and the pain was so excruciating that she could not bear the weight of a sheet to touch her legs. Protected them with a barrel-hoop cut in two and crossed. Prescribed Syrup of Hydriodic Acid, in teaspoonful doses, every two hours. The pain was subdued within fifteen hours. Continued treatment for about a week. No relapse.

Case. II.—Mrs. E. P. R., aged thirty-five years, was seized with a chill on January 9, 1883. Began the use of Syrup of Hydriodic Acid on the 10th, and continued the treatment, in three-teaspoonful doses, diluted with water, until the 16th, when the patient was dismissed cured.

Case III.—Mrs. C. F. C., aged thirty-nine. I was sent for on March 21, 1883, and found her suffering from acute rheumatism; prescribed the Syrup in two-teaspoonful doses; continued treatment to the 29th, when I made my last visit, and found my patient dressed, sitting up, and free from pain.

* The tincture of arnica should be made according to the United States Pharmacopœia, and not by using the fluid extract of arnica flowers and making a tincture by the addition of diluted alcohol, as this tincture makes an unsightly, dirty brown mixture.

Case IV.—B. E., aged fifty-five, a merchant, has had rheumatism for many years. I attended him with a sub-acute attack on the 13th of January, 1884; left him on the 18th free of pain. The medicine was given in tablespoonful doses; every tw hours, up to this time, when he was ordered to continue its use in smaller doses and at longer intervals for another week. On the 4th of April, 1885, I was called to attend him with a similar attack. Used the Syrup. The pain was still severe on the 5th, so I used the lotion to his hand and knee, which gave immediate relief. The last visit was made on the 8th, at which time he was entirely free of pain and swelling.

Case V.—Mrs. L. A., aged twenty-seven, was taken with a chill, followed with high fever, on the 21st of January, 1885. I was called on the 22d. and found her suffering with an attack of acute rheumatism, affecting both upper and lower extremities. As usual in such cases, prescribed the Syrup in three-teaspoonful doses, every two hours, using the lotion as well. She was relieved in thirty-six hours, and was about the house in one week. Ten days after I made my last visit, her husband told me that she had had a relapse from imprudently sitting by an open window. Medicine was repeated, and in four or five days she was again free from pain.

Case VI.—W. C., aged twelve years, of stout build, was seized with rheumatism in knee, ankle and hand. Saw

him for the first visit on February 20, 1885. I prescribed the Syrup in two-teaspoonful doses, diluted in water (which should always be done); the lotion was also used in this case. My last visit was made on the 28th, when I left him walking about the house.

Case VII.—S. G. S., aged thirty-eight, clerk, was seized on the morning of the 15th of March, 1885. Commenced the use of the Syrup on the evening of the same day; he was free of pain and swelling on the 16th, and went to his business on the 17th. He has had no return.

Case VIII.—J. C., aged fifty-one, has had chronic rheumatism for more than twenty years. About the beginning of March, 1885, he was seized with a violent pain in right knee while walking, followed, after a few days, with heat and swelling. The affected knee was two inches larger in circumference than the other; the trouble was looked upon as a sprain for about three weeks, when rheumatism was suspected. Began the use of the Syrup in tablespoonful doses in a gill of water; he felt relief after the second dose; treatment was continued every two or three hours until eight ounces of the Syrup were taken, which removed all further trouble, No relapse.

Case IX.—John L., aged forty, coachman, was taken down on May 4, 1885; his knees were very much swollen and very painful. He was given the Syrup in tablespoonful doses every two hours, and was able to be around the

house in four days and a half. He had a relapse on the 24th of the same month, caused by exposure, and was seized with a chill, and again used the Syrup and lotion. Advised the Syrup to be continued in decreasing doses and at longer intervals for a week or ten days.

Case X.—J. F., aged forty, conductor. I was sent for on May 29, 1885, and found his right knee and left ankle swollen and very painful. He also complained of pains in his fingers and toes. The Syrup was given, in tablespoonful doses, every two hours; the lotion was also used. He was free from pain within forty-eight hours. Dismissed him on the 3d of June, without pain or ache.

The following cases were kindly furnished me by my friend, Dr. Conrad Wienges, of this city:

Case I.—August 28, 1883.—P. M., engineer, aged forty-nine; sub-acute rheumatism in both knees and ankles. Gave him two teaspoonfuls of Syrup of Hydriodic Acid every three hours. Dismissed him September 3d, free from pain or ache. This patient had several attacks previous to this one, but was always confined to the house from four to six weeks.

Case II.—June 16, 1884.—Mrs. L., aged thirty-five; sub-acute rheumatism in the chest and right shoulder. Two teaspoonfuls of Syrup of Hydriodic Acid every four hours. It relieved the pain entirely in twenty-four hours.

Case III.—March 30, 1885.—F. McC., nineteen years

old; worker in tobacco factory; acute rheumatism in both knees and ankles. He was ordered two teaspoonfuls of Syrup of Hydriodic Acid, every two hours, in wineglass of water. At my next visit, on the 31st, he could flex his knees and move the foot with comparative ease. April 1st, the swelling had vanished and the patient was sitting up when I called. He was dismissed on the 3d, cured, and resumed his occupation on the 3d of April.

Case IV.—May 7, 1885.—G. E. P., thirty years old; deck-hand; acute rheumatism affecting his right shoulder and elbow. The pain was excruciating—so much so that one-fourth of a grain of morphine, every hour for four hours, was given to produce temporary relief. He took two-teaspoonful doses of Hydriodic Acid every two hours. At my next visit, sixteen hours later, the pain had almost disappeared, and he could move the arm with ease in any direction. On the 9th he was entirely free from pain, and was dismissed, cured, on the 11th.

The following cases were kindly furnished me by Dr. Baumann, House Physician at the New Haven Hospital, **New Haven, Conn.:**

Case I.—M. F. M., Irish, aged twenty-five; single; painter. Was attacked April 24, 1885, with acute rheumatism in the ankles and knees, and on the 25th it extended to his shoulders, elbows and wrists. Entered hospital this day; temperature 103°F. The pain was so severe that the

slightest movement caused great distress. No cardiac lesions. Ordered Syrup of Hydriodic Acid, one teaspoonful, every two hours.

28th—Patient has improved greatly. Temperature 100°; joints not so painful.

29th—Improvement continues. Patient got up to-day.

May 4th—He is up and around the wards, and has no pain in his joints. Treatment continued.

5th—Discharged cured.

Case II.—P. M., aged twenty-two years. Has been under treatment in the surgical wards since April 28th for gluteal abscess. He had an attack of rheumatism in both wrists and hands, and pain in the chest and back. The pain and swelling was so severe that he could not bear to be touched.Temperature 100°. Ordered salicin, grains xx, every three hours, and sodii bicarb., ʒss, every three hours.

May 30th—No marked improvement, and was transferred to medical wards. Salicin was stopped, and he was given Syrup of Hydriodic Acid, two teaspoonfuls every two hours. Temperature 101.6°. Morphine, hypodermically, had to be administered during the night on account of severe pain.

31st—Pain diminished; morphine not required. Temperature 101.2°.

June 1st—Patient slept well without the use of anodynes.

Fingers could be moved without pain, but chest was still painful.

2d—Patient comfortable; all pain and inflammation have disappeared. He fed himself for the first time to-day. Temperature 100°.

5th—He was transferred to a surgical ward, and Syrup stopped.

8th—Temperature rose to 100.3°, and another attack threatened. He was given the Syrup in the same doses. Next day temperature fell to normal. The Syrup was continued a week, and then gradually diminished and stopped.

Remarks.—The patient had previously had several attacks of rheumatism, each lasting from two to four weeks. He had a mitral regurgitant murmur on admission.

The Syrup was tried in a number of sub-acute cases with good results, but was unsuccessful in chronic cases.

I hope that I have thus been able to impress upon the minds of my readers the fact that, by the use of the Syrup of Hydriodic Acid in cases of acute inflammatory rheumatism, our results will be far more satisfactory, and our cases less tedious and uncertain."—*From the New York Medical Journal, August* 8, 1885.

LUMBAGO.

Chas. Lengel, M. D., Kansas City, Mo., writes:

1423 Grand Avenue, Kansas City, Mo., Sept. 1, 1886.

Mr. R. W. Gardner, New York City—Dear Sir:—On account of the great value of your Syrup of Hydriodic

Acid as a medicine, and the signal service it has rendered me, I wish to make the following statement:

I have practiced medicine about twenty-nine years. Am stout and healthy and am fifty years of age.

On the 27th of February last I contracted a severe cold. Next morning, upon getting up, was very stiff and sore. As I was preparing to leave my office, was struck with lumbago, thrown to the floor, and became entirely helpless,

I sent for the best physician in my neighborhood, whose diagnosis was lumbago. I told him to give me an injection (hypodermic) of morphia and atropia, which somewhat relieved my unbearable pain. I was ordered lithiated hydrangea ʒi every three hours.

A few hours afterwards a second physician visited me, who prescribed cinchonid. salicylate, gr. v. every three hours, and emplast. sinapis to my spine; still my misery increased. Cupping was tried, and hypodermic injections repeated twice a day. One professional brother comforted me by the opinion that "I would be laid up a month or so."

The fifth day I was taken worse, my urine being hot and of a very high color, and could only be voided with great difficulty. About noon your pamphlet was handed me. After giving it a careful reading, and not having previously heard of your preparation, I concluded at once to try it. My druggist sent me only eight ounces, as there was but one pound in the whole city.

I took ʒiij every two hours all night and next day up to six p. m. After I had taken ʒvj I felt a desire to urinate,

and not having been able to move an inch twenty-four hours before, I now arose without difficulty and was very much relieved of pain. I went again to bed and took the medicine as before. Next day (Sunday), 3 p. m., I was called to see a patient in the neighborhood. Much against my wife's wishes, I got up, dressed, walked more than a block, climbed up stairs, and attended my patient. When I returned I did not again take to my bed, but sat down in my office writing editorial matter, as I am the chief editor of a newspaper. As I had but little of the Syrup left, I reduced the dose to ʒij every four hours. I took the last on Monday night and felt considerably improved. My druggist ordered more of the Acid, as I was fearful of a relapse. I was obliged to wait eight days for it. All that week I attended to my extensive practice, and wrote, every night, a few columns of editorial matter.

I hardly know how these remarkable results became so quickly known, but during the next week your Syrup of Hydriodic Acid could be bought by the dozen in this city.

Other physician. used it at once. I have myself prescribed it, since, very often for rheumatism, asthma, and hay fever, &c., with great satifaction in every single case of that kind.

It seemed to be my duty to send you this statement of facts, to render you my hearty thanks, and to recommend it to the medical profession for further trial.

I am, respectfully, &c.,

CHAS. LENGEL, M. D., Kansas City.

ANOTHER LETTER FROM CHAS LENGEL, M.D., KANSAS CITY, MO.

"Kansas City, Mo., June 30th, 1888.

R. W. Gardner, Esq.,—Dear Sir:—In addition to my last letter I wish to state that I have since prescribed your Syrup Acid Hydriodic, in many cases of rheumatism, asthma, hay fever, bronchitis and laryngitis with excellent results. It has given me more satisfaction in these cases than any remedy I have used during my thirty years of practice.

I know that I was the very first physician to use it in this city, as I could get only eight ounces of it when I first prescribed it, while it is now obtainable at every respectable drug store. The cure of lumbago (in my own case), in three days, seemed to awaken a great interest in it among our physicians. One year after my first attack of lumbago I had another spell of it, which was promptly relieved by four ounces of your Syrup. There is not a day that I do not prescribe it with general satisfaction to myself and patients.

I would caution physicians to see that decomposition has not occurred, generally caused by the careless manner druggists handle it. If decomposed I have it exchanged at once. I shall certainly continue the further use of it, and recommend it to every brother practitioner, with the assurance that he will not be disappointed in giving your Syrup Hydriodic Acid a fair and impartial trial wherever indicated. Yours very truly,

Chas. Lengel, M. D."

LETTERS RECEIVED FROM J. W. DANIEL M.D., HOUSTON, TEXAS.

"Houston, Texas, Jan. 16th, 1886.

R. W. Gardner, Esq., New York:—I am just now in receipt of the fourth edition of your pamphlet, calling attention of physicians to your preparations, more especially the Syrup Hydriodic Acid. Some three years since, my attention was directed to this preparation (by an article, I think, published in the *New York Medical Record,*) in the treatment of asthma. I immediately ordered, through the druggist, several pounds of your preparation. My mother was a chronic asthmatic: one pound of the preparation (Syrup Hydriodic Acid) relieved her entirely; only at long intervals now is there any indication of return of the disease, a few doses of the Syrup relieving her at once.

Mrs. P., for some years a sufferer during the autumn and winter, has entirely recovered after the use of the remedy for a short time. There has been no return of the disease with her.

Mrs. G., an elderly lady, and for many years a great sufferer from asthma, has been relieved almost entirely. In this case there may be cardiac complications; still the relief has been positive for the time being; sufficient time has not elapsed to determine the permanency of it.

I am treating acute and chronic rheumatic conditions with the preparation with marked benefit. Also in secondary and the more advanced stages of syphilis, with results highly satisfactory. I am much pleased with the preparation as made by you, and am prescribing it constantly.

My druggist has been making a syrup of Hydriodic acid and filling my prescriptions with it, but my patients complain that it does not act like the medicine they have been taking, and that the "last" was entirely different from your article. Yours respectfully,

J. W. DANIEL, M. D."

Under date of July 6th, 1888, Dr. Daniel writes as follows:

"I have used your preparation of the Syrup of Hydriodic Acid constantly and exclusively since my letter to you, in bronchial and catarrhal asthma, the consecutive conditions of syphilis, rheumatism, and in glandular enlargements (scrofulous). My success in these cases has been almost phenomenal, and I am more than gratified to be able to add my endorsement of a preparation which has given me such unvarying results. Yours respectfully,

J. W. DANIEL, M. D."

REMARKS UPON THE TREATMENT OF PHTHISIS PULMONALIS BY HYPOPHOSPHITES

The disease is produced by a condition in which *oxidizable* phosphorus (a natural constituent of the normal system) is more or less deficient. This causes the tubercular diathesis, which precedes, accompanies, and is necessary to the production and progress of the local lesion.

Inasmuch as *oxidizable* phosphorus contributes to the tissue-forming elements, circulating in the blood, the faculty of absorbing oxygen, and when absent or lacking in quantity

this affinity for oxygen is lost or impaired, the indications seem plain for the administration of this lost or decreased element, in an oxidizable condition, whereby it would be reasonably supposed that the power to absorb oxygen would be restored to the tissue-forming bodies, enabling them to be properly oxidized while passing through the lungs. This should, therefore and consequently, change the diathesis and by restoring the natural condition, stop the progress of the local lesion in the lung. When these tissue-forming elements reach the lungs in a patient suffering from this disease, they are not properly oxidized, as in a condition of health, not because of a deficiency of oxygen, but b cause they have lost the power of appropriating it, owing to the lack of oxidizable phosphorus, which by its powerful affinity for oxygen contributes to these bodies by its presence, the power to seize upon and utilize it. The direct effect of this condition is the precipitation in the lung of a partly oxidized and consequently abnormal matter, which, if properly oxidized, would have continued on in the circulation and have been absorbed as healthy tissue. This precipitate in the lung is tubercle. This in brief, is Churchill's theory, without amplification and scientific detail.

Now does practice prove this theory to be correct?

Who has not noted the bracing effect of the administration of a hypophosphite upon the reduced and devitalized system of victims to phthisis—the returning color, the increased appetite, the return of the power to assimilate food, the increased bulk of alvine discharges, the powerful tonic action upon the nervous system, the plethoric condition of

the blood vessels after its use for a time, the decrease of night sweats, the allayed cough, the increased tone and vigor of the system and various other changes, all showing an approach to the normal state? What other remedy will produce the same or similar results?

But, like many other remedies, it is capable of producing bad effects if too freely or imprudently administered. The dose *must* be adapted to the condition of the patient. While the Hypophosphite is the remedy for this diathesis if cautiously given, it becomes the most dangerous if indiscriminately used.

The pathological effects of over-dosing are disastrous. By increasing too suddenly the force of the circulation, without giving time for increased nourishment and strength to the texture of the weakened and impoverished blood vessels, the tissues of which have been appropriated by the urgent need of the general system, as from lack of proper assimilation of food, the patient has been living upon his own tissues—a hemorrhage ensues. This crisis is referable directly to the sudden and over stimulation of the circulatory system, beyond the capacity of the blood vessels to resist. Another result of over-dosing is a too active disintegration of the tubucular deposit causing a crisis by sloughing. This process, which is therapeutically desirable, must not go on too fast, beyond the strength of the patient to bear. Time is a necesssary and indispensable element in the recuperative process. It must not be forgotten that all the functions must improve together, for which time is necessary, as new tissue must form and metamorphosis must take place,

and morbid and prurient matter must be eliminated; hence care should be taken to go slow, constantly watching for pathogenic phenomena, never running risks because the patient shows, at first, brilliant returns by large doses, for he will soon cross the line upon dangerous ground, and the sudden relapse will remove him from the crest of the wave that seemed bearing him on to victory, to the dark valley of **the shadow of death.**

While the smallest doses should, therefore, be administered at first, and gradually and watchfully increased as the patient is found to bear them without showing signs of pathological effects, the limit or maximum quantity to exhibit during twenty four hours, should not exceed seven grains, and in many cases, especially when the disease is far advanced, this quantity will be found too great. In fact, it is unsafe to give the *alkaline* hypophosphites at all, in treating extremely advanced cases, the Hypophosphite of Quinine being far preferable in the initial treatment of those in this condition, until it is found practical to use either the lime or soda salt, according to indications, in, at **first, very small doses.**

It being borne in mind that the main object sought in using Hypophosphites is to assimilate oxidizable phosphorus (the electro positive ingredient of the salt), and that this object may be obtained by the administration of any one of these salts, as well, as if a combination of several were used, it becomes a matter of great importance to investigate the effects upon the patient of the several electro-negative bodies, that we may eliminate all those which are found to

produce unfavorable effects, and to confine our use to such only as will best agree with the patient. Dr. Churchill has paid great attention to this point, and has found it inadvisable and dangerous to use Iron, Potassa, Manganese, or, in fact, any others than Lime, Soda or Quinine. He never prescribes combinations, even of these, but uses that one found to best meet the indications of each particular case in accordance with the symptoms of the patient, or the effects produced by the remedy, varying the dose as circumstances require. *Chemical purity* of the remedy is also *absolutely essential* to success, and as the commercial salts are almost always impure, it is necessary to use only those specially prepared for the purpose, and at once protected in Syrup from oxidation, to secure desirable results.

Even if the commercial salts when first prepared were pure, which is not the case, they would not continue so, as under the combined action of air and moisture, they become changed by oxidation into phosphite and phosphate, unless protected by Syrup. In Phthisis, complications must of course be treated by appropriate remedies, but during such treatment the use of the Hypophosphite should be suspended. Unless during such crisis, no other medicine should be given, reliance being placed entirely upon the Hypophosphite to relieve cough, night sweats, &c. Narcotics and stimulants should not be used if the Hypophosphite treatment is adopted, as they prevent the proper effect of the remedy, and lower the vital condition of the patient in the end, though they may apparently lessen some of the urgent symptoms. Neither should Cod Liver Oil be used.

In a number of instances physicians have written me complaining that their patients were not progressing well under the treatment and I have found that they were using morphine to procure rest at night and to allay cough. Upon discontinuing this, the patients suffered more for a day or so, but afterwards improved right along and made good recoveries.

Other instances have occurred where the dose was too large and the patients not only failed to improve but were actually suffering relapse, when by advice the dose was discontinued for a few days and then resumed in much smaller quantity with the happiest results.

If the patient is not progressing, be assured there is a reason for it, and, generally, one that can be controlled. Do not blame the remedy when the fault is because of its inconsiderate use. Either the wrong salt is being administered; or, what is worse, a combination containing contra-indicated salts; or some other remedy is being used which prevents the favorable action of the Hypophosphite; or the dose is too large; or the patient is suffering from a complication which interdicts the the use of the Hypophosphite for the time being; or the Hypophosphite is impure, and consequently unable or produce favorable results.

In the foregoing, reference is made only to the treatment of Phthisis, in which disease the system is remarkably susceptible to the action of Hypophosphites, but it must not be supposed that the same rules apply to the treatment of other diseases, when the Salts are well borne, and may be given in large doses with nothing but advantage to the patient.

Combinations also may be used with great success in many cases, but the point as to purity of the remedy is important in all cases. It seems to have become a favorite remark with several manufacturers that their preparations are made with a "slight alkaline reaction," as though this was a very important advantage, when, in fact, it is an open confession of impurity. With a little more chemical knowledge it would be seen that "alkaline reaction" means the presence of "free alkali" or its "carbonate," which, not being a hypophosphite, is manifestly an impurity, as the hypophosphites of the alkaline bases, when pure, have a *neutral* reaction Churchill claims that the presence of these impurities renders them next to useless by preventing their favorable physiological action. He cites instances. Having obtained the favorable action of the pure Hypophosphite in several cases of Phthisis, he purposely added an alkaline carbonate, when his patients at once began to lose ground, which continued while the impure salt was used. When, however, they were put upon the pure salt again they improved as before. This experiment was tried again and again, until the cause of retrogression was fully demonstrated. Again, if the combination contains Hypophosphite of Iron, the presence of free alkali will cause its precipitation.

The Elixirs are intended as *substitutes* for the Syrups in cases where the Syrup disagrees or cloys the stomach. The Syrups are preferable, and are recommended in all cases where they can be used.

CAUTION.—The writer would caution the profession against *misquotations* from the text of Churchill's work.

It would seem that no honorable person would be guilty of misquoting an authority, when the result is a matter involving health or life. Nevertheless, the writer has seen, and has in his possession, matter sent generally to the profession, wherein words not in the original text have been added, misleading the physician, misrepresenting Churchill's views, and evidently added for the purpose of inducing the medical adviser to prescribe a single preparation (a combination of Hypophosphites of Lime and Soda) in all cases requiring Hypophosphites.

Any physician can verify this statement by comparing the said quotations with the original text of Churchill's work.

The attention of physicians is also called to the fact that a combination of Hypophosphites of Lime, Soda and Potassa has become known among the trade as "Churchill's Formula." This is also misleading, as Churchill never prescribes combinations, and the words quoted were added by various manufacturers without Churchill's authority and contrary to his usage, for trade purposes.

Respectfully, R. W. GARDNER.

PHTHISIS.

A. U. Evarts, M. D., Special Examiner Surgeons Pensions, La Porte City, Iowa, writes:

"LA PORTE CITY, Iowa, July 17th, 1886.

R. W. GARDNER—DEAR SIR: I wrote Messrs. Schieffelin & Co., some time since, requesting a package of Syrup Calcis Hypophos., Gardner's make, which, experience has taught me, is a chemically pure preparation. Our druggists have ordered your Syrup, and I am satisfied that

through it alone I have saved one consumptive's life, and probably two. The positive case was the worst one,—in the third stage of phthisis. Patient confined to bed—fever, cough, night sweats, and hemorrhage that presaged immediate dissolution of patient. Right lung cavernous, and almost wholly hepatized—left lung partially implicated. After a thorough examination, I gave the patient about three weeks to live. Put patient permanently upon Gardner's Syrup Calcis Hypophos. Improved slowly but surely for a year and a half; occasionally patient has return of bad symptoms. On an average of once in three months for two years this case, a woman, has had a formation and rupture of pelvic tumor.

Have had a number of other cases, first and second stages, and have been obliged to prescribe different makes of the syrup, and have found disappointment resulting from their use. To be brief, I will say I look for mathematical precision when I use your Syrups of Lime or Soda. I get better resalts in treatment since following Dr. Churchill's mode. Hereafter I will record my cases for the benefit of the profession. These general facts will suffice to awaken the interest of the true physician in the treatment of phthisis.

Respectfully,

A. U. Evarts, M. D."

D. C. Reynolds, M. D., 1519 So. Broad Street, Philadelphia, Pa., writes:

"R. W. Gardner, Pharm. Chemist, 158 William Street, New York,—Dear Sir:—I have given your Hypophosphites a thorough trial in phthisis, and am constrained to say they have given me the best satisfaction in that disease of any I ever tried, and they are many.

Yours truly,

D. C. Reynolds, M. D."

LIST OF GARDNER'S
SPECIAL PHARMACEUTICAL PREPARATIONS.

Gardner's Syrup of Hydriodic Acid.
6·66 grains Iodine in one fluid ounce.

Gardner's Syrup of Hypophosphite of Lime.
20 grains in one fluid ounce.

Gardner's Syrup of Hypophosphite of Soda.
20 grains in one fluid ounce.

Gardner's Syrup of Hypophosphite of Iron.
4 grains in one fluid ounce.

Gardner's Syrup of Hypophosphite of Potassa.
16 grains in one fluid ounce.

Gardner's Syrup of Hypophosphite of Manganese.
4 grains in one fluid ounce.

Gardner's Syrup of Hypophosphites of Lime and Soda.
20 grains in one fluid ounce.

Gardner's Syrup of Hypophosphites of Iron and Quinia.
4 grains Iron and 1 grain Quinia in one fluid ounce.

Gardner's Syrup of Hypophosphites of Lime, Soda, and Potassa.
17 grains in one fluid ounce.

Gardner's Syrup of Hypophosphites of Lime, Soda, and Iron.
17 grains in one fluid ounce.

Gardner's Syrup of Hypophosphites of Lime, Soda, Iron, and Potassa.
17 grains in one fluid ounce.

Gardner's Syrup of Hypophosphites of Lime, Soda, Iron, Potassa, Manganese and Strychnia. 21 grains of combined salts including ⅛ grain Strychnia in one fluid ounce.

Gardner's Elixir of Hypophosphite of Lime.
20 grains in one fluid ounce.

Gardner's Elixir of Hypophosphite of Soda.
20 grains in one fluid ounce.

Gardner's Elixir of Hypophosphite of Iron.
4 grains in one fluid ounce.

Gardner's Elixir of Hypophosphite of Potassa.
16 grains in one fluid ounce.

Gardner's Elixir of Hypophosphite of Quinia.
8 grains in one fluid ounce.

Gardner's Elixir of Hypophosphites of Lime and Soda.
20 grains in one fluid ounce.

Gardner's Elixir of Hypophosphites of Lime, Soda, and Iron.
17 grains in one fluid ounce.

Gardner's Elixir of Hypophosphites of Lime, Soda, and Potassa.
17 grains in one fluid ounce.

Gardner's Elixir of Hypophosphites of Lime, Soda, Iron, and Potassa.
17 grains in one fluid ounce.

Gardner's Solution of Ferrous Nitrate (unalterable).
26 grains in one fluid ounce.

Prepared BY ROBERT W. GARDNER,

Pharmaceutical Chemist, New York.

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Chemically Pure Salts alone used.